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DERWENT-ACC-NO: 1998-074022
DERWENT-WEEK: 200035
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TITLE: Thin film transistor production method e.g. for
active matrix type
liquid crystal display - involves forming heat oxide film
by second heat
oxidation process on surface of area where heat oxide film
is removed by first
heat oxidation process

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PRIORITY-DATA:

1996JP-0088759 (March 17, 1996)
, 1996JP-0026210 (January 19, 1996)
, 1996JP-0026037 (January 20, 1996)
, 1996JP-0032874 (January 26, 1996)
, 1996JP-0032875 (January 26, 1996)
, 1996JP-0032981 (January 27, 1996)
, 1996JP-0058334 (February 20, 1996)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE
PAGES	MAIN-IPC	
US 6077731 A	June 20, 2000	N/A
000	H01L 021/00	
JP 09312260 A	December 2, 1997	N/A
109	H01L 021/20	
KR 97060391 A	August 12, 1997	N/A
000	H01L 021/28	
TW 336327 A	July 11, 1998	N/A
000	H01L 021/00	

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO
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APPL-DATE		
US 6077731A	N/A	1997US-0785489
January 17, 1997		
JP 09312260A	N/A	1996JP-0335152
November 29, 1996		
KR 97060391A	N/A	1997KR-0001415
January 20, 1997		
TW 336327A	N/A	1996TW-0116281
December 30, 1996		

INT-CL (IPC): H01L021/00; H01L021/20 ; H01L021/28 ;
H01L021/322 ;
H01L021/324 ; H01L021/336 ; H01L021/84 ; H01L027/12 ;
H01L029/786

RELATED-ACC-NO: 1997-542501;1997-542866 ;1997-547859
;1997-547860 ;1997-547991
;1998-030329 ;1998-074021 ;1998-074143 ;1998-074144
;1998-074145 ;1998-074146

ABSTRACTED-PUB-NO: JP 09312260A

BASIC-ABSTRACT:

The method involves introducing a metallic element which encourages crystallization of silicon into a non-crystal silicon film (10). The crystalline silicon film (15) is obtained by a process which involves crystallization of the non-crystal silicon film by first heat processing. The second heat processing is done in an oxidising atmosphere.

The metallic element and heat oxide film which exists in the crystalline silicon film are removed. A heat oxide film is then formed by heat oxidation for the second time on the surface of the area where the heat oxide film is removed by first process.

ADVANTAGE - Offers high performance. Is highly reliable.

ABSTRACTED-PUB-NO: US 6077731A

EQUIVALENT-ABSTRACTS: The method involves introducing a metallic element which encourages crystallization of silicon into a non-crystal silicon film (10).

The crystalline silicon film (15) is obtained by a process which involves crystallization of the non-crystal silicon film by first heat processing. The second heat processing is done in an oxidising atmosphere.

The metallic element and heat oxide film which exists in the crystalline silicon film are removed. A heat oxide film is then formed by heat oxidation for the second time on the surface of the area where the heat oxide film is removed by first process.

ADVANTAGE - Offers high performance. Is highly reliable.

CHOSEN-DRAWING: Dwg.1/63

DERWENT-CLASS: L03 U11 U12 U13 U14

CPI-CODES: L04-C02; L04-C07; L04-C12A; L04-C16; L04-E01;

EPI-CODES: U11-C01J1; U11-C03; U11-C03J; U11-C18A3;
U12-B03A; U13-D07;